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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,133	03/02/2006	Per Anders Stenberg	P18463-US1	3249
27045	7590	12/21/2007	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			LIU, HARRY K	
		ART UNIT	PAPER NUMBER	
		3662		
		MAIL DATE	DELIVERY MODE	
		12/21/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/595,133	STENBERG ET AL.
	Examiner	Art Unit
	Harry Liu	3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 04 December 2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 19-34 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 19-34 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

Receipt is acknowledged of applicant's amendment filed (12/04/2007). Claims (19-34) are pending and an action on the merits is as follows.

Applicant's arguments with respect to claims (19-34) have been considered but are moot in view of the new ground(s) of rejection.

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### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 19-22, 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson (6282427) in view of Hamalainen (2004/0014499).

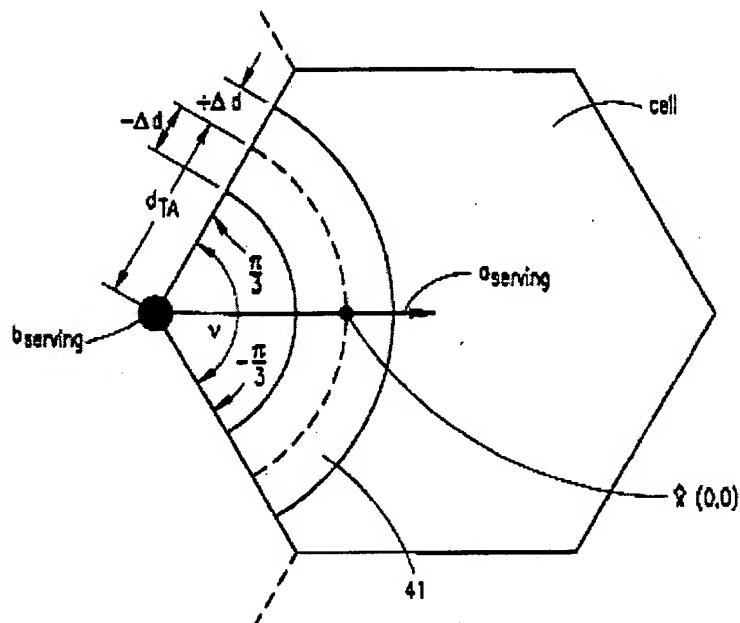
Regarding claims 19, 22, 27, 30, Larsson discloses a device for positioning a radio transmitter (Abstract & title), comprising:

means for determining distance to a receiver of known position according to a parameter reflecting propagation delay time (column 3, lines 34-42);

means for determining direction from the receiver to the transmitter (see Fig. 4 below).

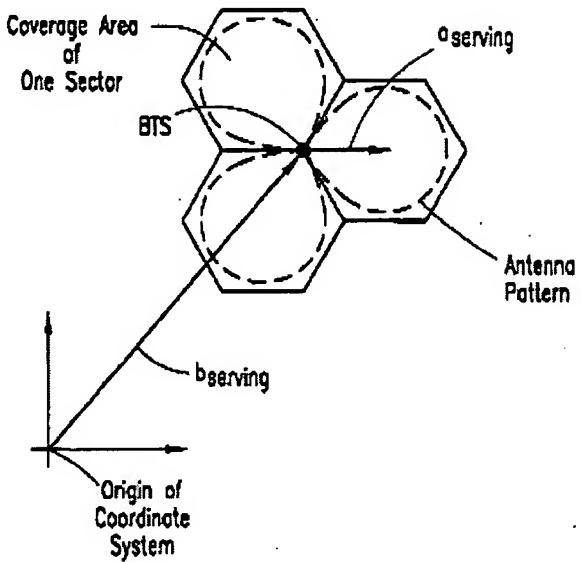
Larsson fails to specifically disclose using received signal level (dB) in determining the direction of transmitter. However, Hamalainen teaches determining

direction of a received signal by averaging the signal power (Abstract). It would have been obvious to modify Larsson with Hamalainen with direction determining based on received signal power in order to provide a better focused signal for a smart antenna system.



**FIG. 4**

Regarding claims 20, 28, Larsson discloses the distance determination is based on at least one of the immediate neighbors of the cell where the transmitter is served (see FIG. 2 below).



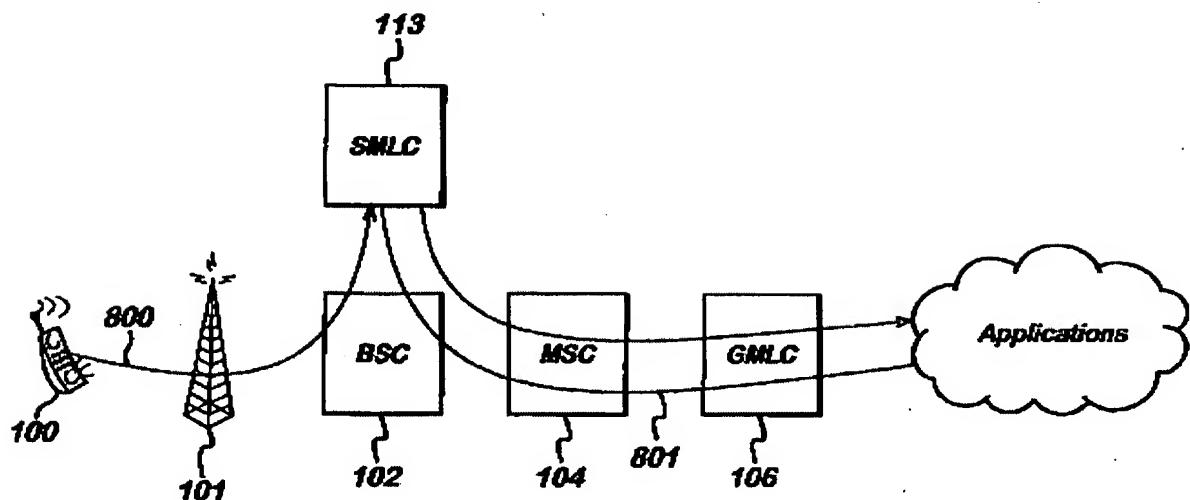
**FIG. 2**

Regarding claims 21, 29, Larsson discloses the position determination includes cell/sector identity (column 3, lines 34-42).

3. Claims 23-26, 31-34, are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson (6282427) in view of Hamalainen (2004/0014499), and further in view of Mannoja (7069023).

Regarding claims 23-26, 31-34, Larsson as modified with Hamalainen discloses the position determination based on averaging but fails to disclose the average is formed in a network control element (claims 23,31) or standardized interface (A-bis, Iub) (claims 24, 32) or BSC (claims 25, 33) or RNC (claims 26, 34). However, Mannoja teaches the use of network control element (SMLC, BSC, Fig. 8 below) and RNC (for column 3, lines 9-25) controlling/calculating the position of mobile. It would have been obvious to modify Larsson with Mannoja by incorporating SMLC, (A-bis, Iub), BSC and RNC into the location service in order to satisfy GSM or UMTS system requirements.

**Fig. 8**

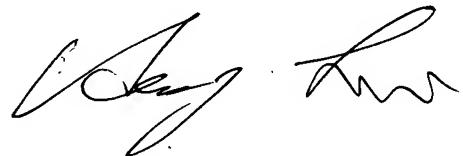


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry Liu whose telephone number is 571-270-1338. The examiner can normally be reached on Monday -Thursday and every other Friday..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarca can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-270-2338.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Harry Liu  
Examiner  
Art Unit 3662  
December 19, 2007



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